Pl Mr. Dhania

See US 5847516 JP cited

DERWENT-ACC-NO: 1997-198792

DERWENT-WEEK: 200048

TITLE: Load drive unit e.g. EL element in display apparatus - in which anode and cathode voltage of power supply is selected using selection output unit for driving EL element

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PATENT-ASSIGNEE: NIPPONDENSO CO LTD[NPDE] , DENSO CORP[NPDE]

PRIORITY-DATA: 1995JP-0206344 (August 11, 1995) , 1995JP-0168822 (July 4, 1995) , 1995JP-0206345 (August 11, 1995) , 1996JP-0117979 (May 13, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 09054565 A	February 25, 1997	N/A	007	G09G 003/30
US 6121943 A	September 19, 2000	N/A	000	G09G 003/30
US 5847516 A	December 8, 1998	N/A	000	G09G 003/12
US 6064158 A	May 16, 2000	N/A	000	G09G 003/10

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP 09054565A	N/A		
1995JP-0206344			August 11, 1995
US 6121943A	CIP of		
1996US-0675672			July 3, 1996
US 6121943A	N/A		
1997US-0855396			May 13, 1997
US 6121943A	CIP of	US 5847516	
N/A			

US 5847516A N/A
1996US-0675672 July 3, 1996
US 6064158A Div ex
1996US-0675672 July 3, 1996
US 6064158A N/A
1998US-0204169 December 3, 1998
US 6064158A Div ex US 5847516
N/A

INT-CL (IPC): G09G003/10, G09G003/12 , G09G003/30

RELATED-ACC-NO: 1997-198793, 1997-232724

ABSTRACTED-PUB-NO: JP 09054565A

BASIC-ABSTRACT:

The drive unit uses a power supply (1) whose anode is opened/closed by a first
FET (2). The cathode of the power supply is opened/closed by a second FET (3).
The first and second FETs are turned ON according to the control signal,
alternately.

The anode and cathode voltage of the power supply is selected using a selection
output unit (9) for driving an EL element (100).

ADVANTAGE - Outputs AC voltage of positive/negative suing one power supply.

ABSTRACTED-PUB-NO: US 5847516A

EQUIVALENT-ABSTRACTS:

The appts has an electroluminescent layer. A pair of scanning electrodes
(201,301) are formed on each side of the electroluminescent layer. A pair of
data electrodes (401,402) are formed on other sides of electroluminescent
display panel. These scanning electrodes are orthogonal to the data electrode.
The electrode luminescent element are connected between the scanning electrode
and the data electrode. A pair of scanning electrode drive circuit (2,3) apply
a scanning voltage to these scanning electrodes sequentially while reversing

the polarity between adjacent fields. A data electrode drive circuit (4)
outputs the data voltage to multiple data electrodes.

The display elements are selectively activated depending upon the relationship
between data voltage and the scanning voltage. The scanning voltage and the
data voltage are derived from a voltage supply circuit (5-7). In a positive
field, a scanning voltage (Vr) with positive polarity is supplied and it is
higher than the offset voltage (Vm). At the light emission, the voltage
applied on the scanning side drivers (IC2,IC3) is Vr-Vm.

ADVANTAGE - Reduces breakdown voltage by offset voltage.

US 6064158A

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applied on the scanning side drivers (IC2,IC3) is Vr-Vm.

ADVANTAGE - Reduces breakdown voltage by offset voltage.

US 6121943A

The display has an electroluminescence display field with a number of scanning electrodes (201) on one side of a light output film, data electrodes (401) on a second side and electroluminescence elements (111) at points at which the scanning electrodes and data electrodes cross.

Control circuits (2,3,4) sequentially apply a scanning signal of different polarity to the scanning electrodes and a data signal to the data electrodes to selectively cause the electroluminescence devices to emit light. The sensing signal is fed to the scanning electrodes by feeding constant charging and discharging currents to the scanning electrodes to charge and discharge the electroluminescence elements.

ADVANTAGE - - Reduces charging and discharging times whilst overcoming the problems of heat generation and step current when the scanning signal is applied.

CHOSEN-DRAWING: Dwg.1/7

TITLE-TERMS: LOAD DRIVE UNIT ELECTROLUMINESCENT ELEMENT DISPLAY APPARATUS ANODE CATHODE VOLTAGE POWER SUPPLY SELECT SELECT OUTPUT UNIT DRIVE ELECTROLUMINESCENT ELEMENT

DERWENT-CLASS: P85 T04 U14

EPI-CODES: T04-H03C3A; U14-J03;

SECONDARY-ACC-NO:
Non-CPI Secondary Accession Numbers: N1997-164281